WIRELESS NETWORK DESIGN FOR TELECENTER

IN RURAL AREA

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ABSTRACT

Information and communication technology (ICT) employment and dissemination assists many countries in incorporating many goals of digital divide most importantly by opening telecenters in rural areas. Many telecenter projects have been implemented in Malaysia for example in the last ten years. Deployment of the projects usually, is subjected to so many problems due to inadequate infrastructure and appropriate design. This project aimed at the selection of an effective design of the network with a budget cost estimate, by using a system program which subsequently includes smart questions that would contribute to the solution. The research questions stated are: How to use the technology that fit telecenter project in rural areas? What is the estimated cost of the basic requirements for the design of network infrastructure and the deployment in this area? It was then found that Wi-Fi technology can be adopted as a viable technology in terms of cost for rural areas connectivity by connecting community centers to each other and to the Internet.

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CHAPTER 1

Introduction

1.0 Introduction

Increasing the efficiency of information and communication technology increases the development of a country. Employing the ICT information and technology and its dissemination help many countries in incorporating the goals of digital divide most importantly by opening telecenters in rural areas (Khushchu, 2008).

According to Shamsudin & Arshad (1997) the rural sector is vital to the growth of the country's economic social and political sector (Hilam, 2007). The main focus of the Department of Energy, Water and Communications, Malaysia or KTAK (Kementerian Tenaga Air Dan Komunikasi) like the rest of the world is in the development of infrastructure and services that encourage the development of information and communication technology, part of this is to provide infrastructure facilities for telecommunications and Internet services in rural areas.

The facilities for telecommunications should clarify the roll of telecenter Telecenter is a facility that offers community members the ability to use ICT (information and communication technologies) in a public place. Telecenter often provide the only connectivity available to many community members, and their services may be offered with or without a fee (Mathew, 2002).

In general, according to Hayakawa et al. (2007) telecommunications is where people are able to access computers, the Internet and other techniques that help in the collection of information and communication at the same time as they to participate develop digital skills.

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